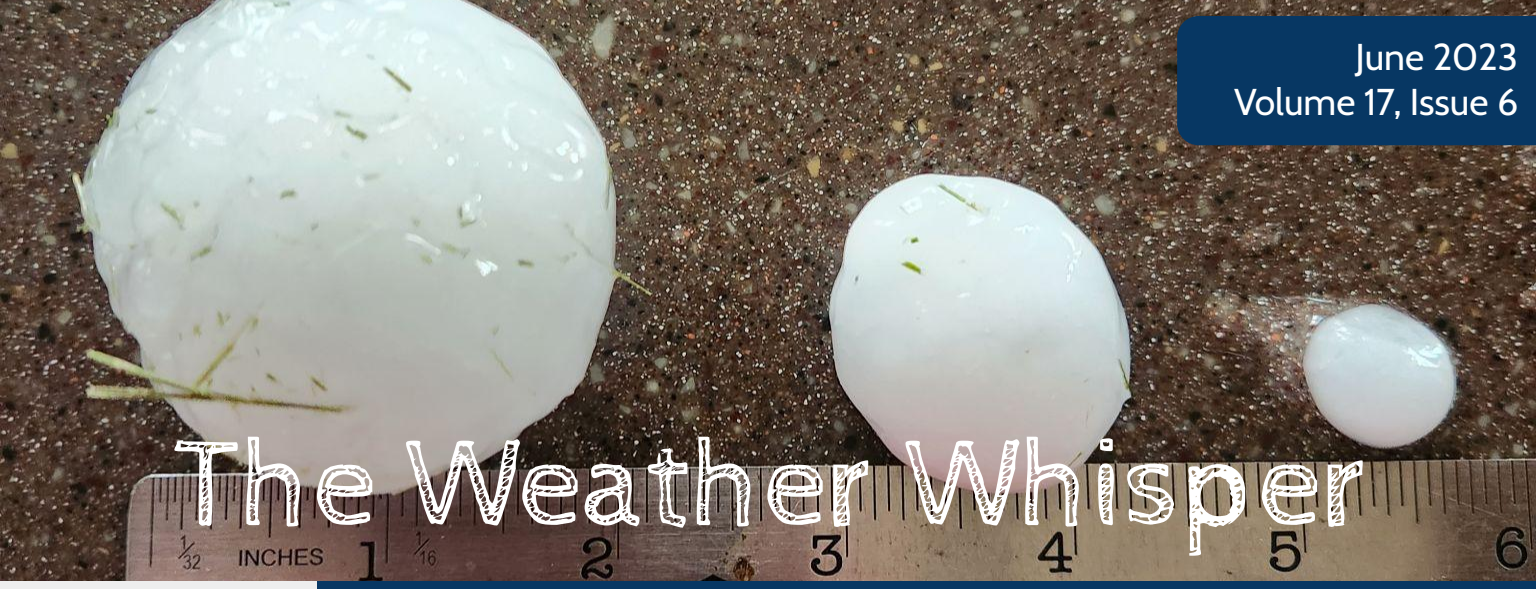

June 2023
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The Weather Whisper

WHAT'S INSIDE?

IEMA Conference

Brooke Hagenhoff, Meteorologist

Each May the Iowa Emergency Management Association (IEMA) meets in Okoboji, Iowa for a conference to discuss relevant topics, listen to presentations form colleagues and partners, and most importantly to meet with counterparts from counties across Iowa. This year, two meteorologists from NWS Des Moines joined with representatives from the four other NWS offices that serve portions of Iowa to present a 90 minute panel presentation to the group. Emergency managers face a myriad of challenges every day, but when it comes to large scale events that significantly impact a community, weather is the most common culprit. Building strong, trusting relationships is an important part of ensuring that support through an impactful weather event goes smoothly, facilitating active communication between the NWS and emergency managers.

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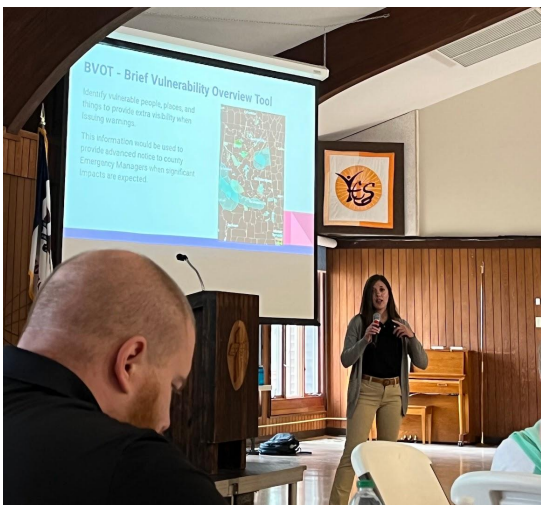
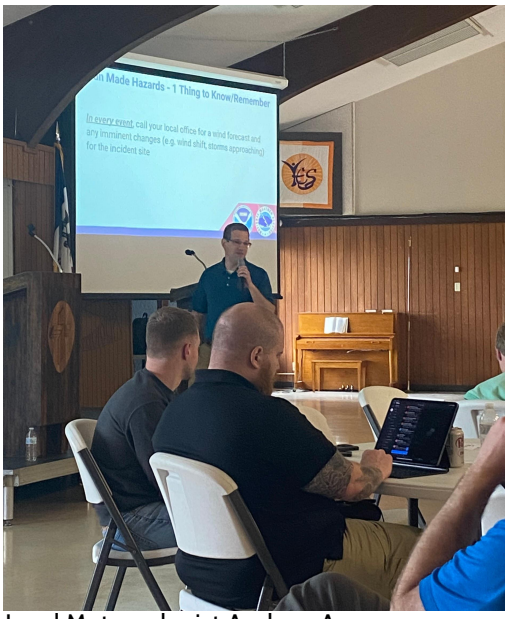


Meteorologist Brooke Hagenhoff discusses methods to better support vulnerable populations.

IEMA President and Adair/Guthrie Emergency Manager Bob Kempf addresses the group.



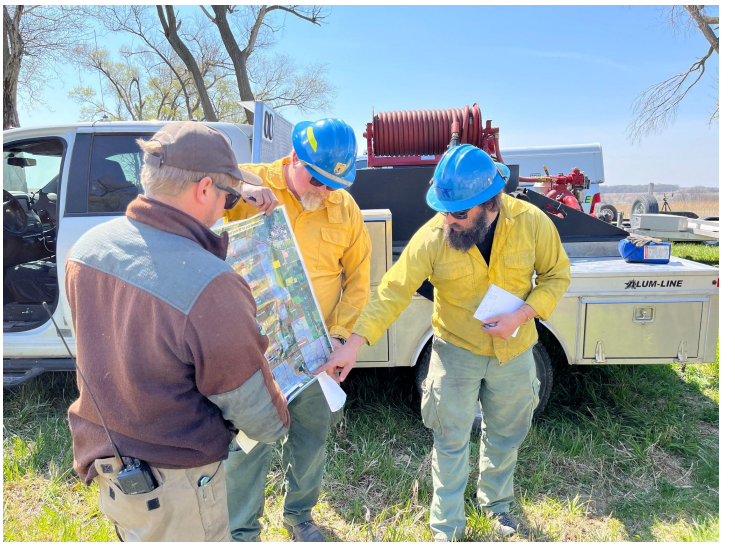
Lead Meteorologist Andrew Ansorge speaks on Fire Weather and support for hazmat incidents.

Support doesn't stop at just those high impact weather events. Emergency managers and the NWS regularly work together, as weather has a way of impacting events and activities. Weather support is provided for outdoor events such as county fairs or markets, and in the event of a fire or hazmat incident, forecast information is used to help determine plume size and direction. While meteorologists and emergency managers occasionally meet for meetings, large event support, or in the unfortunate event that a damage survey is needed, most interactions occur over the phone. The IEMA conference provided and excellent opportunity for us to meet face to face, and to interact with our NWS counterparts serving other portions of Iowa. Relationships are key and we're grateful for the opportunity to attend.

Prescribed Burn Experience

Andrew Ansorge, Lead Meteorologist

In late April, I had the opportunity to join staff from the US Fish and Wildlife Service (USFWS) and partner agencies on a prescribed burn at Neal Smith National Wildlife Refuge (NWR). The planned burn area, also called a burn unit, was for a southeast portion of the refuge, which had not been burned in 6 years. So, the purpose of this burn was to help improve wildlife habitat and control invasive species that had grown into the burn unit.



The burn boss briefs staff on the plan for the prescribed burn.

While the USFWS conducts the burn, the National Weather Service provides a forecast specific to the burn unit and the needs of the fire weather partner, which often includes relative humidity, mixing height, and winds among others. This helps the fire practitioners know whether conditions will be within the bounds of the prescription allowing for a safe burn. With winds forecast from the southeast to the northwest, this would generally take the smoke over the refuge as it lifts above ground level. While it was a dry day, relative humidity was not critical and would allow for safe burn conditions.

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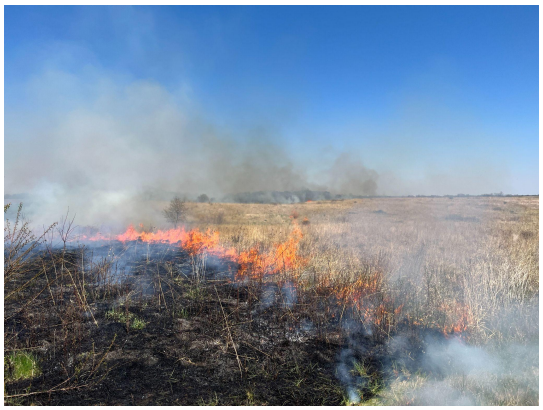
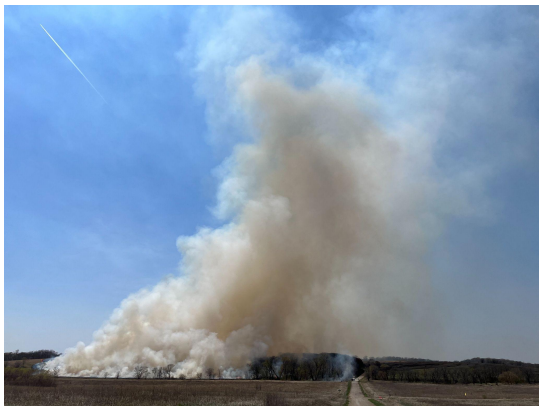
I arrived around 10:30am to Neal Smith NWR with crews assembling from Neal Smith, Port Louisa, IA, and Crab Orchard, IL NWRs along with a few others. After a bit of coordinating, we drove out to near the burn unit. We received a briefing from the burn boss providing information on the burn unit, who and where personnel would be, radio communication channel, the weather forecast, and safety messages for the team. The crews then headed out to their respective areas in the burn unit and after a test burn that showed conditions were safe, the full prescribed burn began. Teams worked to burn around the edge of the burn unit first and then small sections within the burn unit, which helped to ensure the fire remained under control. In addition, the small sections burned within the unit also provided an escape route for animals to safely exit the area as the burn continues on.





The weather conditions worked well for this prescribed burn with southeast winds prevailing and good smoke dispersion. The smoke plume from this burn was sampled by our radar reaching up to around 6,500 feet. Being out on the prescribed burn with these partners allowed me to learn how the weather forecast is used and impacts their decision making. It is also fascinating to watch the burn take place and gain a better understanding of how they are conducted. Thanks to the USFWS for inviting me out for this prescribed burn.

STAFF SPOTLIGHT

Roger Vachalek

Background

Synoptic and Mesoscale Analysis, Winter Weather

Lead Meteorologist

20 years of service

I've spent most of my professional life forecasting Iowa's weather – for over 35 years now in total and over 20 years in the National Weather Service – and feel that Iowa is one of the best places to be for both weather and my favorite hobby – bicycling. I've ridden RAGBRAI three times. After living on a working farm for 10 years while living in Eastern Iowa, I've come to appreciate and respect the long-standing tradition of the American Farmer. Great down to earth folks who work hard, play hard and make the most of life. Weather interests here include synoptic and meso-scale analysis/forecasting and winter storms and winter travel impacts. Hobbies include cycling, reading, computers, and travel.

On the Cover: A cluster of thunderstorms moved through portions of central Iowa during the afternoon of May 7, 2023 producing widespread hail damage and impacting portions of I-80 east of Newton, where multiple reports of tennis ball (2.5") to baseball size hail (2.75") or larger were received. Photo from Story County. Photo credit: Melissa Muzzy.

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